



MEMORANDUM

To: Wendy Cherubini, Maine Office of Program Evaluation and Government Accountability (OPEGA)

From: Lawrence O. Picus on behalf of Lawrence O. Picus and Associates

Subject: **Work Plan for Independent Review of Maine's EPS Funding Act**

Date: November 15, 2012 (Revised November 26, 2012)

Following our successful meetings in Maine from October 23-25, and our conference call with Phil McCarthy and Wendy Cherubini on November 8, the next step in our independent review of Maine's EPS is development of a work plan to guide our work through the delivery of the Part 1 (April 1, 2013) and Part 2 (December 1, 2013) reports. The goal of this memo is to define for OPEGA the deliverables we intend to produce and how we will interact with the Joint Education and Cultural Affairs Committee as we proceed with the independent review, so they can be linked to the requirements of the Resolve establishing the scope of work and the requirements of the Request for Proposals.

Along with a description of the eleven deliverables included in the independent review, we have attached to the end of this memo a summary table linking each study to the key elements in the Resolve and the RFP.

Six of the deliverables fall into Part 1 of the independent review and five will be completed during Part 2 of the study. Because the Part 2 studies will be based on the findings from Part 1, the descriptions of the studies for Part 2 offer less detail at this time, and those provided may change to reflect Part 1. As the studies proceed, details of our work will be provided to OPEGA through bi-monthly progress reports and other informal communications with OPEGA and other state officials who provide us with data needed for our analyses.

PART 1 (Report Due April 1, 2013)

1. Maine's Current Funding System

The first study will provide a description of Maine's current EPS funding formula detailing the historical context leading to the development of the EPS funding system and

outlining how it has been modified since its implementation in 2005-06. We will review historical documents as well as official materials that help us understand how resources are delivered to School Administrative Units (SAUs) and their component schools. This analysis will also identify the issues that need to be addressed as part of the independent review. Those issues include:

- a. Analysis of the components of the EPS including:
 - i. Accuracy and Complexity of the computations
 - ii. Concern that EPS does not cover all of the costs of schools
 - iii. Alternative approaches for estimating resource needs of small and rural schools
- b. Analysis of the initiative requiring 55% state support of schools
- c. Consideration of the minimum allocation to SAUs/municipalities (a percentage of the EPS computation or a percentage of special education costs computed through the EPS, a figure that changes from year-to-year)
- d. Measurement of Fiscal Capacity and understanding of possible alternative measures of ability to pay that include personal or household income (specifically concern that there are a number of municipalities or SAUs with high property wealth and low personal income) and issues of property tax overburden
- e. The computation of the regional cost adjustment
- f. Other issues identified in the course of our work either from our analyses or as identified by stakeholder groups as coordinated through the Joint Committee

2. Comparative Analyses

- A. As called for in the Resolve and the RFP, the second study will compare Maine's education system with other states. This study will include a number of 50 state comparisons as well as a set of more in-depth comparisons of Maine with a set of agreed upon comparison states. We anticipate these comparison states will include all other New England states as well as others that have similar characteristics and can provide valuable information to Maine policy makers. Variables we will review to identify comparison states include (to the extent possible):

1. Total student population (NCES)
2. Number of districts (NCES)
3. Average number of students per district (NCES)
4. Average household income (U.S. Census)
5. Average spending per pupil (U.S. Census)
6. Relative tax effort (NCES)
7. State/Local/Federal education expenditure split (U.S. Census)
8. NAEP scores (NAEP)
9. Graduation rates (NCES)
10. College going rates (ECS data)

State comparison data will include:

1. Student Data
2. Education Revenue and Expenditures (total and per-pupil)

3. Governance Data
4. Teacher/Staffing and Salary Data
5. Student Achievement Data

B. The study will also provide information on alternative education funding mechanisms used by other states. This analysis will include types of mechanisms used by other states and will discuss:

1. Distribution systems
2. Adequacy systems
3. How systems are revised and updated over time
4. How each state determines their share of education funding
5. Local (municipal) ability to pay and alternative wealth measures (e.g. income and how it is used)
6. How states use circuit breakers to provide property tax relief
7. Adjustments for district characteristics (enrollment, size, location, etc.)
8. Provisions for special education, economically disadvantaged and limited English proficient students

3. Equity Analysis

We will conduct a school finance equity analysis using traditional equity statistics. This will include traditional measures of revenue dispersion (range, range ratio, coefficient of variation, McLoone Index) as well as measures of fiscal neutrality (correlation and fiscal capacity elasticity).

This analysis will be conducted using the SAU as the unit of analysis. Given the lack of comparative data for years prior to implementation of the EPS, we will conduct this analysis from school year 2005-06 forward. In addition, we will use student count and Total State Valuation data provided by the Maine Department of Education (and the Maine Revenue Services, as needed) from the year in which actual data are used in computation of state aid to SAUs.

Revenue dispersion data will be computed on a per-pupil basis to estimate horizontal equity, and on a weighted per pupil basis using various pupil weights, including the pupil weights in the current EPS formula, to provide a measure of the system's vertical equity.

An important question in conducting an equity analysis is determining which revenue components to include in assessing equity. Our intent is to assess equity based on EPS Revenue, and total SAU revenue (which exceeds the EPS funding level). In addition we would assess the EPS and SAU revenues both with and without federal funds and with and without pupil transportation funding.

We will provide analyses of per pupil revenues by wealth quintiles based both on property wealth per pupil and, to the extent we can identify appropriate data, by income quintiles.

4. Tribal Funding

We will describe how tribal schools are included in state funding systems in such states as Oklahoma, New Mexico, North and South Dakota, Arizona, Montana, Wyoming and the other New England states, and compare these to the way Maine funds tribal schools. We also will describe the degree to which state funding system have been able to deduct any additional federal dollars in the state aid calculations for such schools.

Given that tribal schools in Maine only serve grades K-8, and only serve a portion of the American Indian students in the state, we will also look at how other states address Title VII Indian Education funding for indigenous students not in tribal schools. We also will look at the extent to which other states access and rely on competitive federal grant funding to support programs for indigenous students both within and outside of tribal schools.

5. Adequacy Models

Maine's EPS funding system is an adequacy model. As part of the independent review we will provide an analysis of how Maine's system compares to other states that have adequacy based funding systems (WY, AR, OH, MD and others we identify). This will include an analysis of the EPS provisions that require the annual state share of the total cost of funding public education to be 55%, and identify how other states approach determining their state share of the adequate funding level. In addition we will provide a comprehensive description of how the EPS components compare to our own Evidence-Based model. This report will discuss the following elements generally included in adequacy models:

1. Pupil counts
2. Multiple prototypical schools and districts, with multiple prototypes down to a PK-12 student school/district with 100 or fewer students
3. Teacher ratios, to include core teachers, elective teachers, and instructional coaches, for Pre-K for 4 year olds and 5 year olds not in K (i.e. Pre-K), and grades K-12
4. Substitute teachers
5. Guidance counselors and nurses
6. Librarians
7. Education techs/paraprofessionals
8. Supervisory aides
9. Library techs
10. School clerical/secretary
11. Principal
12. Assistant Principal/Athletic Director
13. Dollar per pupil resources for:
 - a. Instructional materials
 - b. Professional development
 - c. Computers and related technologies
 - d. Gifted and talented
 - e. Student activities and co-curricular activities/sports
14. Central office

- a. Professional staff
- b. Support staff
- c. Miscellaneous expenditures (insurance, etc.)
- d. Communication
- 15. Operations and Maintenance
 - a. Custodians
 - b. Maintenance
 - c. Groundskeepers
 - d. Utilities
 - e. Supplies, etc.
- 16. Economically Disadvantaged (ED) student adjustment
- 17. Limited English Proficient (LEP) student adjustment
- 18. Special Education
- 19. Career and Technical Education
- 20. Pricing all staff, including how to adjust for years of experience and education
- 21. Regional Adjustment Factor

The comparison of the two models, along with the comparative data and equity analyses described above will be presented to the Joint Committee on April 1 or a later date mutually agreed upon. We will work with the Joint Committee and other stakeholders (as agreed upon by the Joint Committee) to identify the parameters of the adequacy model and analysis to be developed in Part 2.

6. Teacher Compensation Study, Part A

In this part of the independent review, we will provide an analysis of methods used by other states to attract promising educators to teach in the state's school districts, including such approaches as salary scales, signing bonuses and other incentives. We will summarize alternative compensation plans in use in other states as well as identify state-level options that show promise for Maine. This Part 1 report will provide Maine with recommendations for further research and review during Part 2 of the Independent Review of the EPS.

We will describe a new type of salary structure that:

- Links pay increases over time to teacher effectiveness
- Aligns pay levels with effectiveness in producing student learning gains through the assessment of instructional practice
- Can be augmented with additional incentives for subject area shortages, geographic shortages, and with bonuses for improved student learning.

In short, we will describe the issues Maine needs to consider if it feels changes in the teacher salary structure are needed.

We also will summarize the research on the degree to which the use of smaller bonuses – signing bonuses, bonuses and incentives for subject area shortages, incentives for teaching in urban and rural communities, and incentives that recognize geographic differences in the price of teachers of the same quality – have impacted recruitment and retention of teachers.

The salary systems we will suggest both align the way teachers are paid with the strategic directions of Maine's education system and provide a salary structure that addresses individual desire to reach the top of the salary schedule more quickly than the 25-30 years required by today's teacher salary schedules. Moreover, the salary systems we identify will help districts ensure that those teachers who do reach the highest salary levels do so on the basis of their effectiveness in teaching student to high standards, not simply due to longevity.

PART 2

7. Teacher Compensation Study, Part B

This study will develop and grow based on the findings of the Part A teacher compensation study (deliverable #6 above). Based on the recommendations and based on discussions with the Joint Committee we will assess our recommendations as well as alternatives suggested by the Joint Committee in the context of the overall EPS funding system. We will emphasize the new approaches being tried by districts and states to change the overall teacher salary structure, with a focus on how these approaches impact incentives for teacher recruitment and retention.

8. Stakeholder Input

An important component of Part 2 of the independent review will be seeking feedback from the Joint Committee and from stakeholders into the direction of our recommendations and ensure the recommendations we make are responsive to Maine's policy makers and education stakeholders. We will coordinate our efforts through the Joint Committee and plan to meet with the Joint Committee at the following approximate times (subject to the Committee's schedule):

1. In late January or early February 2013 following the organization of the Legislative session to discuss the parameters of the study
2. In April 2013 to discuss the findings of the studies completed as Part 1 of the independent review
3. Up to three more times between June and October 2013 to solicit their views on our recommendations
4. In December 2013 to discuss the findings of the studies completed as Part 2 of the independent review
5. In January or Early February 2014 to describe our findings during the 2014 session of the Maine Legislature

We also are prepared to solicit the views of stakeholder groups (e.g. teachers, school administrators, school board members, representatives from education associations, etc.)

during our time in Maine meeting with the Joint Committee. The exact form and format of this stakeholder input will be determined in consultation with the Joint Committee.

9. Case Studies of Improving Schools

As described in our proposal, we will conduct in-depth case studies in a sample of 10 schools that have shown strong improvements in student achievement in recent years. Although not specifically called for in the RFP, we have included these important case studies in our proposal because it is critical to determine the degree to which the strategies for improvement deployed by these institutions align with the Theory of Action built into the Evidence-Based model on which our resource distribution recommendations will initially be based, and the degree to which our model should be adjusted to reflect practices that are more effective in Maine. In identifying the sample of schools, we will work with the Committee, its staff and others as appropriate to help identify those schools that are making the most progress in improving student performance – not those with the highest test scores, but those with the largest consistent *gains* in student outcomes.

10. Recommendations for Recalibration of EPS based on EB model

This component of the study will produce an estimate of adequate educational resources for Maine’s SAUs based on our Evidence-Based model as modified by feedback from the Joint Committee and from stakeholder groups as identified by and in consultation with the Joint Committee. We will develop an Excel-based spreadsheet that estimates educational resources at the SAU level for all SAUs in the state for the 2012-13 school year and provide a working copy of the model to OPEGA and to the Maine DOE.

11. Final Report

Based on the findings from the ten deliverables described above, we will provide a final report to the Joint Committee and OPEGA. This document will include an executive summary of our findings and recommendations as well as the full reports.

**Independent Review of Maine’s EPS Funding Act
Study Design Summary
Lawrence O. Picus and Associates**

Study Requirements (From RFP and Resolve)	Individual Studies (Lawrence O. Picus and Associates)
Part 1 Due April 1, 2013	
<p>A1. <i>Whether the school funding formula and the subsidy distribution method in the laws of the State are fair and equitable and how the EPS Funding Act compares to other state’s school funding systems that are considered to be fair and equitable</i></p> <p style="text-align: right;">Resolve: Sec. 5, Par. 1</p>	<p>Deliverable 2 – Comparative Analyses Deliverable 3 – Equity Analyses Deliverable 5 – Adequacy Models</p>
<p>A2. <i>The various ways that school funding system in other states determine and calculate the costs and components of a comprehensive education system and the advantages and disadvantages of those different approaches</i></p> <p style="text-align: right;">Resolve: Sec. 5, Par. 2</p> <p><i>Review of: The Existing studies of the Essential Programs and Services Funding Act, including research that was conducted to develop the State’s school funding system and research conducted since the enactment of the Essential Programs and Services Funding Act</i></p> <p style="text-align: right;">Resolve: Sec. 6, Par. 1A</p> <p><i>Review of: The existing school finance data collected by the Department of Education and state and local tax revenue data collected</i></p>	<p>Deliverable 2 – Comparative Analyses</p> <p>Deliverable 1 – Maine’s Current Funding System</p> <p>Deliverable 1 – Maine’s Current Funding System</p>

<p><i>by the Department of Administrative and Financial Services, Bureau of Revenue Services related to the education finance system under the Essential Programs and Services Funding Act</i></p> <p>Resolve: Sec. 6, Part 1B</p> <p><i>Review of: The education finance systems in comparable states with an emphasis on other state in New England and states committed to education quality, student equity and taxpayer equity</i></p> <p>Resolve: Sec. 6, Part 1C</p>	<p>Deliverable 2 – Comparative Analyses</p>
<p>A3. <i>The percentage of the total cost of public education that is provided by the state in other state's school funding systems and how the state share is funded in the other states</i></p> <p>Resolve: Sec. 5, Par. 3</p>	<p>Deliverable 2 – Comparative Analyses</p>

<p>A4. <i>The advantages and disadvantages of calculating state aid to school administrative units based on student enrollment count and property valuation</i></p> <p>Resolve: Sec. 5, Par. 4</p>	<p>Deliverable 2 – Comparative Analyses</p>
<p>A5. <i>How other states define a municipality's ability to pay for public education and what the arguments are in favor of and against those definitions</i></p> <p>Resolve: Sec. 5, Par. 5</p>	<p>Deliverable 2 – Comparative Analyses</p>
<p>A6. <i>The effectiveness of state aid provided by other states' school funding systems to support economically disadvantaged students in local school districts as compared to the support provided to economically disadvantaged students in school administrative units under the laws of the State</i></p> <p>Resolve: Sec. 5 Par. 6</p>	<p>Deliverable 2 – Comparative Analyses</p>

Part 2 Due December 1, 2013	
<p>A7. <i>Changes that should be made to the definitions of the cost components and to the funding distribution method in the EPS Funding Act to provide adequate resources for a comprehensive education system and to more accurately determine the percentage of essential programs and services funding levels that each school administrative unit should receive from the State</i></p> <p style="text-align: right;">Resolve: Sec. 5, Par. 7</p> <p><i>The recommended alternatives necessary to provide adequate resources for a comprehensive education system and to more accurately determine the percentage of essential programs and services funding levels that each school administrative unit should receive from the state</i></p> <p style="text-align: right;">Resolve: Sec. 6, Part 2A</p> <p><i>The recommended alternatives to the definitions of the cost components and to the funding distribution method in the Essential Programs and Services Funding Act</i></p> <p style="text-align: right;">Resolve: Sec. 6, Part 2B</p> <p><i>The costs and benefits of the recommended alternatives, including comparative analyses and calculations related to education quality, student equity and taxpayer equity</i></p> <p style="text-align: right;">Resolve: Sec. 6, Part 2C</p>	<p>Deliverable 5 – Adequacy Models Deliverable 10 – Recommendations for Recalibration of EPS</p> <p>Deliverable 5 – Adequacy Models Deliverable 10 – Recommendations for Recalibration of EPS</p> <p>Deliverable 5 – Adequacy Models Deliverable 10 – Recommendations for Recalibration of EPS</p> <p>Deliverable 10 – Recommendations for Recalibration of EPS</p>

Additional Studies identified in RFP	
<p><i>B1. The effectiveness of methods used by other states to attract promising educators into teaching in the state's school districts, including but not limited to, the effect of salary scales, signing bonuses and other incentives established in other states on student performance and achievement</i></p> <p>RFP</p>	<p>Deliverable 6 – Teacher Compensation Study, Part A Deliverable 7 – Teacher Compensation Study, Part B</p>
<p><i>B2. An analysis of the Essential Programs and Services Funding Act provisions that provide the annual state share percentage of the total cost of funding public education from kindergarten to grade 12 must be 55%, including an analysis of the cost components that other states include in the state share percentage in their state's school funding systems and the advantages and disadvantages of those approaches</i></p> <p>RFP</p>	<p>Deliverable 1 – Maine's Current Funding System Deliverable 2 – Comparative Analyses Deliverable 5 – Adequacy Models</p>
<p><i>B3. The various ways that other states review and evaluate the effectiveness of the state's school funding system, including provisions that enable state policymakers to adapt the state's school funding system to changing circumstances, including but not limited to changes in student population and property valuation, so that the state's school funding system can continue to be current, relevant and fair</i></p> <p>RFP</p>	<p>Deliverable 2 – Comparative Analyses</p>

<p><i>B4. The various ways that other states provide for the funding of tribal schools, including but not limited to, the interaction of the state's school funding system with federal funding provisions for tribal schools and the advantages and disadvantages of those approaches</i></p> <p>RFP</p>	<p>Deliverable 4 Tribal Funding Study</p>
<p><i>Other Deliverables</i></p>	<p>Deliverable 8 – Stakeholder Input Deliverable 9 – Case Studies of Improving Schools</p>